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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/536,955	10/18/2005	Qing Zhu	0149-P03068US00	1020	
***	7590 12/18/200 MAN, HERRELL & S		EXAMINER		
			SNYDER, STUART		
			ART UNIT	PAPER NUMBER	
1648					
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SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
31 D	PAYS	12/18/2006	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	10/536,955	ZHU ET AL.				
Office Action Summary	Examiner	Art Unit				
	Stuart W. Snyder	1648				
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet v	vith the correspondence ac	ddress			
A SHORTENED STATUTORY PERIOD FOR F WHICHEVER IS LONGER, FROM THE MAILIN - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicati - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUN CFR 1.136(a). In no event, however, may a on. period will apply and will expire SIX (6) MC statute, cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	31 May 2005.					
	This action is non-final.					
3) Since this application is in condition for al		tters, prosecution as to the	e merits is			
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the applic	ation.					
4a) Of the above claim(s) is/are with						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.			t			
8) Claim(s) 1-18 are subject to restriction and/or election requirement.						
Application Papers						
·· _	, ma im a #					
9) The specification is objected to by the Exa		by the Everniner				
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
The path of declaration is objected to by the	ne Examiner. Note the attache	d Office Action of form F	10-132.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for fo		§ 119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
Notice of References Cited (PTO-892)	4) T Interview	Summary (PTO-413)				
<ul> <li>Notice of References Cited (FTO-032)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-94)</li> </ul>	.8) Paper No	(s)/Mail Date				
Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of	Informal Patent Application				
Paper No(s)/Mail Date	6) Other:	<b></b>				

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## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1-6, drawn to a cell-line that replicates hepatitis C virus (HCV), classified in class 435, subclass 325.
- II. Claims 7 and 8, drawn to a host animal comprising cells that replicateHCV, classified in class 800, subclass 9.
- III. Claims 9-12, drawn to a method for producing cell-lines capable of producing HCV, classified in class 435, subclass 325.
- IV. Claim 13 and 16-18, drawn to a method for screening test compounds which inhibit HCV replication or modulate the antiviral response of interferon alpha, classified in class 435, subclass 5.
- V. Claim 14, drawn to an HCV polynucleotide, classified in class 514, subclass 44.
- VI. Claims 15, drawn to an HCV polyprotein, classified in class 514, subclass 2.

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Although the common technical feature of the claimed inventions is the ability of cell-lines to support the replication of HCV, the technical feature is not novel and is anticipated by Germi, *et al.* Germi, *et al.* teaches that mosquito- and African green monkey-derived cell-lines are capable of replicating HCV, that supernatants derived from cultures of such cells infect HCV naïve cultures, and that HCV is detectible up to 28 days post-infection. Therefore, no special technical feature is involved in the claimed inventions.

- 2. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.
- 3. The examiner has required restriction between product and process claims.
  Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. <u>All</u> claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for

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patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b).

Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues.

See MPEP § 804.01.

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence

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now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart W. Snyder whose telephone number is (571) 272-9945. The examiner can normally be reached on 9:00 AM-5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce R. Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**SWS** 

BRUCE R. CAMPELL, PH.D SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600